

# Installation Manual of Room Air Conditioner

- Read this manual before installation
- Explain sufficiently the operating means to the user according to this manual.

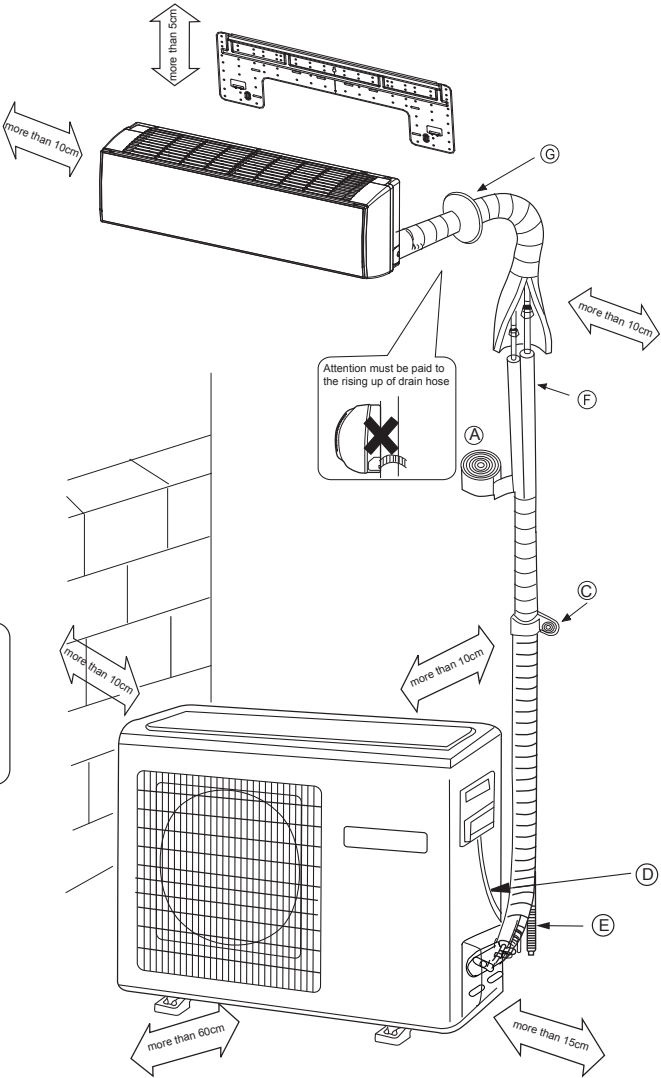
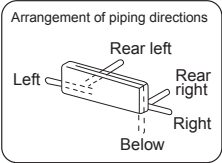
## Necessary Tools for Installation

1.Driver	5.Torque wrench(17mm,22mm,26mm)	9.Nipper	12.Reamer
2.Hacksaw	6.Pipe cutter	10.Gas leakage detector or soap-and-water solution	
3.Hole core drill	7.Flaring tool	11.Measuring tape	
4.Spanner(17, 19 and 26mm)	8.Knife		

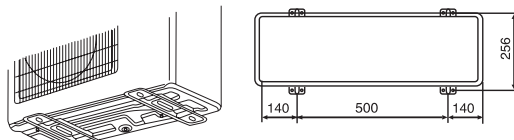
## Drawing for the installation of indoor and outdoor units

Accessory parts		
No.	Accessory parts	Number of articles
①	Remote controller	1
②	R-03 dry battery	2
③	Mounting plate	1
④	Drain hose	1
⑤	φ4X50 Steel nail, cement	6
⑥	φ4X25 Screw Plastic cap	4
⑦	Cover	1
⑧	Cushion	4
⑨	Pipe supporting plate	1
⑩	Drain-elbow	1

Optional parts for piping	
Mark	Parts name
Ⓐ	Non-adhesive tape
Ⓑ	Adhesive tape
Ⓒ	Saddle(L.S) with screws
Ⓓ	Connecting electric cable for indoor and outdoor
Ⓔ	Drain hose
Ⓕ	Heating insulating material
Ⓖ	Piping hole cover



- ※ The marks from Ⓐ to Ⓖ in the figure are the parts numbers.
- ※ The distance between the indoor unit and the floor should be more than 2m.



Floor fixing dimensions  
of the outdoor unit  
(Unit:mm)

HSU-09H03/K(F)  
HSU-12H03/K(F)  
HSU-12C03/K(F)

## Selection of pipe

- To this unit, both liquid and gas pipes shall be insulated as they become low temperature in operation.
- Use optional parts for piping set or pipes covered with equivalent insulation material.

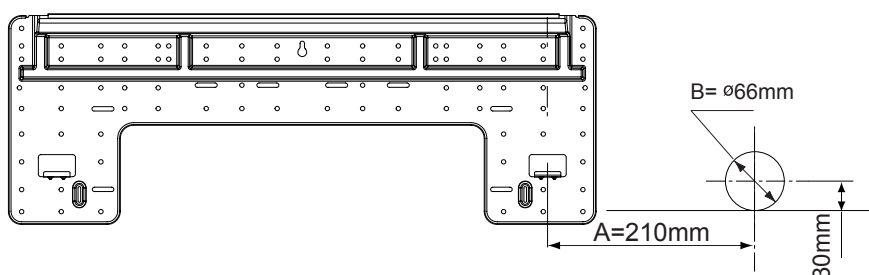
	For 09k	For 12k
Liquid pipe ( $\phi$ )	6.35mm(1/4")	6.35mm(1/4")
Gas pipe ( $\phi$ )	9.52mm(3/8")	12.7mm(1/2")

## Indoor unit

### 1. Fitting of the Mounting Plate and Positioning of the wall Hole

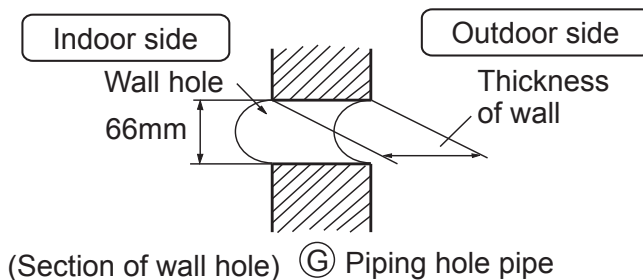
#### When the mounting plate is first fixed

1. Carry out, based on the neighboring pillars or lintels, a proper leveling for the plate to be fixed against the wall, then temporarily fasten the plate with one steel nail.
2. Make sure once more the proper level of the plate, by hanging a thread with a weight from the central top of the plate, then fasten securely the plate with the attachment steel nail.
3. Find the wall hole location A using a measuring tape



### 2. Making a Hole on the Wall and Fitting the Piping Hole Cover

- Make a hole of 60 mm in diameter, slightly descending to outside the wall.
- Install piping hole cover and seal it off with putty after installation

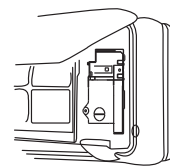


# Indoor unit

## Connecting the indoor/outdoor Electric Cable

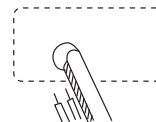
### Removing the wiring cover

- Remove terminal cover at right bottom corner of indoor unit, then take off wiring cover by removing its screws.



### When connecting the cable after installing the indoor unit

1. Insert from outside the room cable into left side of the wall hole, in which the pipe has already existed.
2. Pull out the cable on the front side, and connect the cable making a loop.

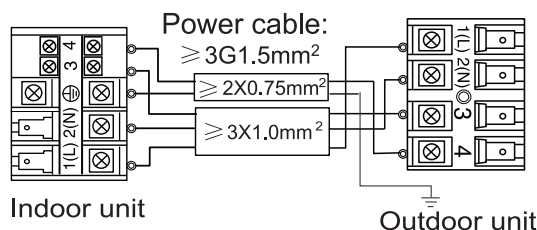


### When connecting the cable before installing the indoor unit

- Insert the cable from the back side of the unit, then pull it out on the front side.
- Loosen the screws and insert the cable ends fully into terminal block, then tighten the screws.
- Pull the cable slightly to make sure the cables have been properly inserted and tightened.
- After the cable connection, never fail to fasten the connected cable with the wiring cover.

Note: When connecting the cable, confirm the terminal number of indoor and outdoor units carefully. If wiring is not correct, proper operation can not be carried out and will cause defect.

1. If the supply cord is damaged, it must be replaced by the manufacturer or its service agent or a similar qualified person. The type of connecting wire is H05/07RN-F or 245IEC57(YZW).
2. If the fuse on PC board is broken please change it with the type of T. 3.15A/250V.  
If the fuse of outdoor unit on PC board is broken, please change it with the type of T. 25A/250V.
3. The wiring method should be in line with the local wiring standard.
4. After installation, the power plug should be easily reached.
5. A breaker should be incorporated into fixed wiring. The breaker should be all-pole switch and the distance between its two contacts should be not less than 3mm.



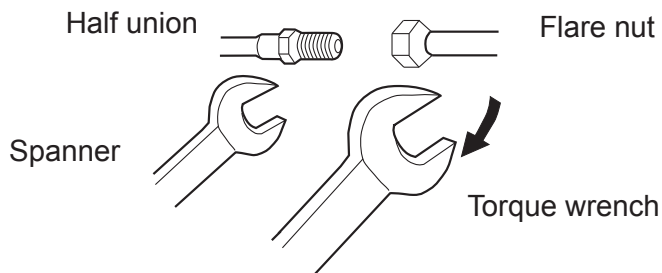
HSU-09H03/K(F)  
HSU-12H03/K(F)  
HSU-12C03/K(F)

# Outdoor unit

## Outdoor unit

### 1.Connection of pipes

- To bend a pipe, give the roundness as large as possible not to crush the pipe
- Connecting the pipe of gas side first makes working easier.
- The max vertical distance between the indoor unit and the outdoor unit is 5 m.



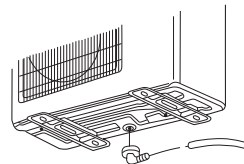
Forced fastening without careful centering may damage the threads and cause a leakage of gas.

Pipe Diameter ( $\phi$ )	Fastening torque
Liquid side 6.35mm(1/4")	18N.m
Gas side 9.52mm(3/8")	40N.m
Gas side 12.7mm(1/2")	55N.m

Be careful that matters, such as wastes of sands, etc. shall not enter the pipe.

### 2.Attaching Drain-Elbow

- If the drain-elbow is used, please attach it as figure. (Note: Only for heat pump unit.)



### 3.Purging Method:

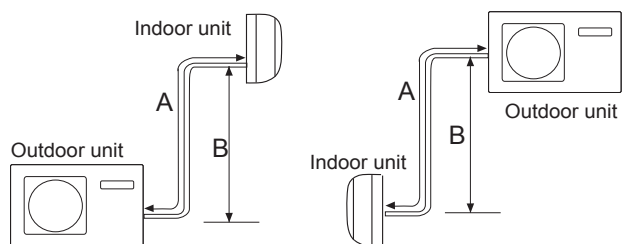
Push the air out of the indoor unit and piping as follows:

- Tighten the caps on the valves with specified torque.

	Tighten torque N.m
Valve rod	7-9
Valve cap	20-25

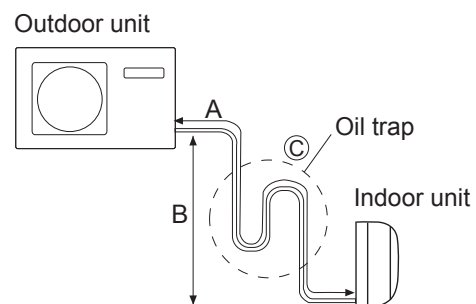
- When connecting pipe exceeds 5 meters, 20g refrigerant shall be added per exceeding meter. Charge according to the following list.

	for 09k 12k		
Piping length	5m	7m	10m
Additional amount	No need	40g	100g



Max.Elevation:B=5m

Max. Length: for 9k A=7m  
for 12k A=10m



#### CAUTION

- In case more than 5 metres, oil trap © should be installed every 5~7m.